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Childhood Society

FOR THE SCIENTIFIC STUDY OF THE MENTAL AND PHYSICAL CONDITIONS OF CHILDREN.

President:

RT. HON. EARL EGERTON OF TATTON.

TRANSACTIONS, VOL. I.

BEING

THE PROCEEDINGS OF THE SOCIETY FOR THE YEAR 1901.

PRICE HALF-A-CROWN.

Hon. Secretary:

W. J. DURRIE MULFORD.

Offices:

PARKES MUSEUM, MARGARET STREET, LONDON, W.

—

1902.

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Childhood Society

FOR THE SCIENTIFIC STUDY OF THE MENTAL AND PHYSICAL CONDITIONS OF CHILDREN.

SIR DOUGLAS GALTON,

K.C.B., D.C.L., LL.D., F.R.S.

The Council of the Childhood Society has fittingly resolved to begin the Society's series of Transactions with a portrait and brief notice of its Founder, the first Chairman of its Council, whose tenure of that post was all too short. The life of Sir Douglas Galton was devoted to the interests of the public health; and in his capacity of Director of Works and Public Buildings, as a member of many Royal Commissions and International Congresses, and in other ways, he promoted those interests with consummate ability and untiring assiduity. His public services earned him the title of Knight Commander of the Bath, his scientific eminence the Fellowship of the Royal Society. He joined the British Association for the Advancement of Science in 1860, and Sir Michael Foster testifies that, "as one of the General Secretaries from 1871 to 1895, Sir Douglas bore, and bore to the great good of the Association, a large share of the burden of the Association's work. In 1895, at Ipswich, he left the post of General Secretary, but only to become President. So long and so constantly did he labour for the good of the Association that he seemed to be an integral part of it." Oxford gave him the honorary degree of D.C.L., and Cambridge that of LL.D. He was a member of the Linnean Society, the Geological Society, the Geographical Society, and the Statistical Society. In 1873, he presided over the Department of Health at the Norwich meeting of the National Association for the promotion of Social Science. His presidential address to the British Association in 1895 was memorable for two things. One, that a momentary faintness overtook him during the delivery, as a sign that the health and energy that had served him so well for his great labours, were beginning to fail; the other, that he advocated the establishment of a National Physical Laboratory. Again quoting from Sir Michael Foster, "Sir Douglas Galton, having previously made a personal study of an institution analogous to the one desired—*viz.*, the Reichsanstalt at Berlin—

seized the opportunity afforded him as President of the Association at Ipswich to insist, with the authority, not only of the head for the time being of a great scientific body, but also of one who himself knew the ways and wants at once of science and of practical life, that the thing which was contemplated was a thing which could be done, and ought to be done, at once. And now (1899) we can say it has been done. The National Physical Laboratory has been founded. The address at Ipswich marked the beginning of an organized effort, which has, at last, been crowned with success. A feeling of sadness cannot but come over us when we think that Sir Douglas Galton was not spared to see the formal completion of the scheme, whose birth he did so much to help, and which to his last days he aided in more ways than one. It is the old story—the good which men do lives after them."

The Ipswich address states clearly the primary considerations which led Sir Douglas Galton to found the Childhood Society. He said: "A report presented by one of your Committees gives the results of observations made on 100,000 school children examined individually in order to determine their mental and physical condition for the purpose of classification. This shows that about 16 per 1000 of the elementary school population appear to be so far defective in their bodily or brain condition as to need special training to enable them to undertake the duties of life, and to keep them from pauperism or crime. Many of our feeble-minded children, and much disease and vice, are the outcome of inherited proclivities. Francis Galton has shown us that types of criminals which have been bred true to their kind, are one of the saddest disfigurements of modern civilisation; and he says that few deserve better of their country than those who determine to lead celibate lives through a reasonable conviction that their issue would probably be less fitted than the generality to play their part as citizens. These convictions point to the importance of preventing those suffering from transmissible disease, or the criminal, or the lunatic, from adding fresh sufferers to the teeming misery in our large towns. And in any case, knowing as we do the influence of environment and the development of individuals, they point to the necessity of removing those who are born with feeble minds, or under conditions of moral danger, from surrounding deteriorating influences. These are problems which materially affect the progress of the human race, and we may feel sure that, as we gradually approach their solution, we shall more certainly realise that the theory of evolution, which

the genius of Darwin impressed on this century, is but the first step on a biological ladder, which may possibly eventually lead us to understand how, in the drama of creation, man has been evolved as the highest work of the Creator."

The Committee to which Sir Douglas Galton referred, and of which he was chairman, was first appointed in 1892, "to investigate the physical deviations from the normal among children in elementary and other schools." It worked in conjunction with a committee, of which also he was chairman, appointed by the International Congress of Hygiene and Demography held in London in 1891, over which too he had worthily presided. The Committee had the active assistance of the British Medical Association and of the Sanitary Institute, in which moreover Sir Douglas took a prominent part. The annual reports of the British Association Committee were prepared by Dr. Francis Warner, the scientific expert by whom the observations were made. In 1896 a full report was published separately, and following the circulation of that report, it was decided to establish a society to continue enquiry and research under the title of "The Childhood Society for the Scientific Study of the Mental and Physical Condition of Children"; of which Sir Douglas became and continued during the rest of his life the Chairman of the Council.

The quotation from the address of 1895 given above contains an interesting reference to his kinsman, Mr. Francis Galton. Though the researches of these two distinguished men have taken different directions, and the official life of Sir Douglas gave a certain bent to his career in that of practical organisation, while the leading note of the career of his namesake has been that of original analytical work, both are alike illustrious examples of the application of scientific skill of a high character to purposes conducing to the material and moral improvement of mankind.

E. W. Brabrook.

The Society has to thank The Sanitary Institute for the use of the Photogravure from which the Portrait of Sir Douglas Galton has been reproduced.

Childhood Society

FOR THE SCIENTIFIC STUDY OF THE MENTAL AND PHYSICAL CONDITIONS OF CHILDREN.

OFFICERS, 1902.

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H. R. KENWOOD, M.B., F.C.S., D.P.H.
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Francis Warner, M.D., F.R.C.P., F.R.C.S.

BIBLIOGRAPHY.

M. Friedeberger, Ph.D.

R. Langdon-Down, M.A., M.B., M.R.C.P.

E. White Wallis, F.S.S.

EDUCATION.

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Francis Warner, M.D., F.R.C.P., F.R.C.S.

THE OBJECTS OF THE SOCIETY.

———:o:———

To promote the study of educational methods and of the environment of children during school life, best suited to ensure the mental and physical development of normal children, as well as of those whose conditions are abnormal, or who are feebly gifted mentally.

To supply information and diffuse knowledge on points connected with the mental and physical status of children, by means of publications, lectures, &c.

To promote the training of teachers specially qualified to deal with such children; and assist by legislation, philanthropic efforts, or otherwise, the provision necessary for them.

REGULATIONS RELATING TO MEMBERS.

———:o:———

The annual subscription of a member is half-a-guinea.

Members will have the privilege of attending all meetings for the reading of papers, or discussion, and all lectures given for the Society, of borrowing books from the Library, and will receive copies of such reports as the Council may publish for general distribution.

A member may introduce one friend to the ordinary meetings of the Society.

Teachers of Hygiene and teachers of Special Classes are admitted as Associate members, without the privilege of voting at Business Meetings, by payment of an annual subscription of half-a-crown.

Societies, Boards of Guardians, and other public bodies are invited to join the Society as affiliated bodies, and may present to the Council questions arising on the care of children for discussion and report.

Childhood Society

FOR THE SCIENTIFIC STUDY OF THE MENTAL AND PHYSICAL CONDITIONS OF CHILDREN.

REPORT OF THE COUNCIL

FOR 1901.

Read at the Annual Meeting, March 19th, 1902.

The Council, in submitting this their Fifth Annual Report, are pleased to be able to record that the past year has been one of progress and development.

The total number of Members on the Register is Eighty-six, this number including fourteen Hon. Corresponding Members, and seventeen Associates; twelve new Members have been elected during the year. A List will be found at page 72.

Parliamentary.

The Recommendations made in the Report on 100,000 children seen in Schools during 1888–1894, were laid before the President of the Local Government Board, urging the Board to take such steps as may be necessary to carry them into effect.

The Recommendations were arranged under the following heads:

(*a*) Appointment of a Scientific Commission of Enquiry by Government.

(*b*) Need of Enquiry as to Feeble-Minded Children.

(*c*) Desirability of a Parliamentary Enquiry as to the care of Feeble-Minded Children, their condition and training.

(*d*) Recommendations of the Royal Commission on Blind, Dumb, &c., as to the Feeble-Minded.

(*e*) Expert Scientific Advice to Government Departments.

The following Memorial was prepared, and submitted by the President to His Grace the Duke of Devonshire:—

To His Grace the President of the Committee of His Majesty's most Honourable Privy Council on Education.

The Memorial of the Childhood Society humbly sheweth:—

1. That the Childhood Society originated from Committees of the International Congress of Hygiene and Demography, the British Association for the Advancement of Science, and the British Medical Association, and has, for several years, been engaged in the Scientific Examination of the Mental and Physical condition of children in schools. The results of the Examination of 100,000 children during the years 1884–91 have been tabulated, classified, and discussed in a Report published by the Society, which affords information as to certain groups of children and the difficulties necessarily attaching to their Education and means of Improvement.

2. That the following conclusions have been arrived at:—

(*a*) Of the school children observed about one per cent. are either physically or mentally deficient to a marked extent.

(*b*) Many of these children have in the past either not attended school; or when attending, have not profited by ordinary education, and the chance it offers of their becoming useful citizens.

(*c*) Such children are a great hindrance to normal Scholars.

(*d*) Harm thus results not only to the individuals, but also to Society from the educational neglect of the feeble-minded child, the defective child growing up unable to earn a living, and possibly open to evil influences.

(*e*) Special separate classes for such defective children should be formed in the area of every Educational Authority in the interest of the children themselves, of others, and of the country at large.

(*f*) A scientific method of selecting the children to be certified as needing such separate treatment should be adopted.

(*g*) Instruction in the peculiarities of and special training for such children should be given to all the Teachers.

(*h*) The method of education should be such as would lead to the elimination of a tendency to mental defects, especially those of a nervous origin, as otherwise the school life may tend rather to the accentuation of such defects.

3. From a careful co-ordination and consideration of the information obtained, the Society desires to make the following specific recommendations:—

(*a*) That a Scientific Commission of Inquiry be appointed by the Government for the purpose of determining the conditions of portions of the School population as to their mental and their physical power; ascertaining the numbers of such as are of imperfect development, their distribution, the possible causes of such defects, and the best means available for training and teaching children mentally or physically defective.

(*b*) That the Government take steps to obtain information as to the social necessities of Defective children of all classes, including those who are also Blind and Deaf, and the physical signs of mental deficiency indicating the need for special training. Investigation with this object should be made in various urban and rural districts throughout the country, and should include an inquiry as to the influence of the special circumstances and occupations of a given locality upon the mental and physical conditions of the population.

(*c*) That the Act of 1899, Elementary Education (Defective and Epileptic Children) [62 and 63 Vict. Chap. 32] be made compulsory, as is the Act of 1893, (Elementary Education of Blind and Deaf Children) [56 and 57 Vict. Chap. 42.]

(*d*) That scientific experts be appointed to assist the Board of Education, with regard to the means to be adopted for the education of children requiring special care.

Your Memorialists pray that your Grace will cause to be included in any Educational measure that may be brought before Parliament provisions to meet the needs of all defective children.

The Society is desirous of submitting recommendations in regard to certain general principles which should be taken into consideration in the constitution of all Educational Authorities, as has been indicated, and should your Grace wish to have further information on the subject, the Council would be glad to have an opportunity of waiting upon you by deputation for the purpose of further explaining their views.

And your Memorialists will ever pray, &c. &c. &c.

The Memorial was signed by the President, Chairman of Council, and the Hon. Secretary.

Prize Essays.

With a view to extending an interest in the work and objects of the Society among Teachers, the Council offered prizes of Two Guineas and One Guinea for the two best Essays sent in on either of the following subjects :—

(*a*) Steps to be taken in discriminating which children are to be

considered as suitable for Special Instruction, with descriptive Notes as to the idiosyncrasies observable in such children.

(SPECIAL INSTRUCTION *is to be understood to refer to cases in which, from some mental or physical disability, however slight, the desirability is indicated of special methods of teaching and training.*)

(*b*) Suggestions (from a Teacher's point of view) for the best methods of giving effect to the Code for day schools, having regard to the various conditions of age, social influences, and future means of livelihood.

In answer to the offer nineteen Essays were sent in, twelve on the first subject and seven on the second; most of the Essays reached a creditable standard. The first prize was awarded to Mr. Mark Hughes, B.A., A.C.P., Headmaster All Saints School, Wellington, Somerset; the second to Mrs. Florence Owen, Special Class, Moorfield School, Bristol.

The Referees appointed to adjudicate upon the Essays were: Rev. T. W. Sharpe, C.B., Dr. Friedeberger, T. H. Jones, J. W. Palmer, Dr. G. E. Shuttleworth, and Dr. Francis Warner.

LECTURES.

During the year two courses of Lectures were held, and the Council have again to record an increased interest shown in the work done by the Society as indicated by the numbers attending the Lectures and taking part in the discussion; the attendance on two occasions being so large as to necessitate the meetings being held in the Parkes Museum.

The success of these Lectures is particularly gratifying, as it is a proof of keener interest in the work of the Society, and the Lectures and Discussions afford a means of diffusing among Teachers and others a knowledge of the scientific study of childhood, for which purpose the Society was established.

To enhance further the value of these meetings the Council have arranged for Members' Evenings, when short papers will be read and discussed, as it is felt that informal discussions of the difficulties met with by Teachers in dealing with the special classes of children would do much to create a more intelligent interest in the care and instruction of the feeble-minded.

The Council desire to record their sincere thanks to the Lecturers, to the Chairmen who have so kindly assisted them in promoting

this department of the Society's work, and to The Sanitary Institute, for the facilities afforded them for the holding of these meetings in its Library and Museum.

The Lectures were as follows :—

NINTH COURSE.

"Food Dietaries in Relation to School Life," by R. HUTCHISON, M.D., M.R.C.P. *Chairman*, CHRISTOPHER CHILDS, M.A., M.D., D.P.H., F.C.S.

"Examinations in their Relation to Mental Growth," by Prof. H. L. WITHERS, M.A. *Chairman*, M. E. SADLER, M.A.

"Experimental Psychology, and the Study of Childhood," by W. H. R. RIVERS, M.A., M.D., F.R.C.P. *Chairman*, G. UDNY YULE.

"Observations of Children after the Methods of Natural History," by FRANCIS WARNER, M.D., F.R.C.P. *Chairman*,

TENTH COURSE.

Discussion on "Steps to be taken in discriminating which Children are to be considered as suitable for Special Instruction, with Descriptive Notes as to idiosyncrasies observable in such children" (Second Prize Essay). *Speaker*, Mrs. FLORENCE OWEN, Head Teacher Special Class, Moorfield School, Bristol. *Chairman*, FRANCIS WARNER, M.D., F.R.C.P.

Discussion on "Suggestions (from a Teacher's point of view) for the best methods of giving effect to the Code for day schools, having regard to the various conditions of age, social influences, and future means of livelihood" (First Prize Essay). *Speaker*, MARK HUGHES, B.A., A.C.P., Headmaster All Saints School, Wellington. *Chairman*, GRAHAM WALLAS, Chairman School Management Committee, School Board for London.

"A Method of Teaching Children to Read (with Demonstration)," By M. FRIEDEBERGER, Ph.D. *Chairman*, J. L. PATON, M.A.

Discussion on "The Practical Bearings of the Investigations of the Childhood Society on Social Questions." *Speaker*, E. W. BRABROOK, C.B., F.S.A. *Chairman*, The Right Hon. EARL OF STAMFORD.

Discussion on "School Discipline, from the Scientific, Inspector's, Teacher's, and Hygienic points of view." *Speakers*, FRANCIS WARNER, M.D., F.R.C.P., A. W. NEWTON, H.M.I., T. H. JONES, National Union of Teachers, Mrs. I. WHITE WALLIS. *Chairman*, G. E. SHUTTLEWORTH, B.A., M.D.

Meetings.

During the year there have been held seven meetings of the Council, three meetings of the Lecture Committee, one Bibliography Committee, one Financial Condition of the Society Committee, and two meetings of the Referees of Essays.

The Fourth Annual Meeting was held on March 14th, 1901, in the Library of The Sanitary Institute, the Treasurer, R. Biddulph Martin, M.P., in the Chair, when the following Officers were elected:—

President.

Rt. Hon. Earl Egerton of Tatton.

Vice-Presidents.

Rt. Hon. Earl Stamford; E. W. Brabrook, C.B., F.S.A.; Rev. T. W. Sharpe, C.B.; T. Bridgwater, M.B., LL.D.; Rev. W. D. Morrison, LL.D.; Francis Warner, M.D., F.R.C.P.

Treasurer.

R. Biddulph Martin, M.P.

The Rev. T. W. Sharpe, C.B., who presided over the Council for two years, having retired, Dr. Francis Warner was elected Chairman of Council.

Committees.

Two Special Committees were appointed to consider: (1) Bibliography of works dealing with the Study of Children, and (2) the Financial Condition of the Society.

Bibliography Committee.

The deliberations of this Committee resulted in the following:—

In addition to the formation of a Library of Reference to Literature on subjects connected with the objects and work of the Society, the Council proposed to arrange, for the use of the Members, a Bibliography of current Books, Pamphlets, and Articles appearing in various periodicals, dealing with the Study of Children.

The Library contains the "Bibliography of Child Study" by L. M. Wilson, and other references to be found in the works of Drs. Shuttleworth and Warner, and other authors, but it is felt, in addition to these, there are many Articles and Works brought to the notice of individual Members which, if noted and recorded in a convenient form, would be of great assistance to the Members at large for reference, and form a fairly complete Bibliography.

The assistance and co-operation of the Members is needed in this work, and in order to ensure an uniform record of the Titles being made, Cards have been prepared on which the particular Article

or Work can be noted under author and subject, and the Cards forwarded to the Secretary.

The Cards will be filed in a convenient form in the Library, and thus, with the Bibliographies already published, it is hoped to maintain a complete reference to Articles and Books dealing with subjects connected with the Society's Work.

The Council trust that all the Members will assist in the effort to make the Library as complete and useful as possible, and will take a supply of these Cards to note Titles they think it desirable should be indexed for reference.

The Secretary will be glad to forward a Supply of Cards to those Members who can co-operate in the work.

Special Committee appointed to consider "The financial position of the Society, with a view to placing the Society on a firm financial basis, thus ensuring the further development of its objects, and work of Teaching and Scientific Investigation," reported as follows:—

1. That the funds at the disposal of the Society are barely sufficient to meet the annual expenditure incurred in organising Lectures, and carrying on the work of the Society as at present arranged.

2. That no balance is available for expenses incidental to the further development and promotion of the objects of the Society.

3. That in order to place the Society on a firmer basis, and ensure the development of its objects, funds are necessary for:—

(*a*) Publication of Annual Volumes of Transactions.
(*b*) Offices and office expenses.
(*c*) Investigations and definite research work.

4. That an endeavour should be made to raise a Capital Fund, more especially for the purpose of meeting the special items of expenditure named in *a*, *b* and *c*.

5. That with the relief afforded by the special funds, the members' subscriptions could be devoted to the purpose of carrying on the business of the Society.

6. That it is desirable that the Society, in order to promote its educational work and extend its influence, should proceed to publish as full a record of its work as practicable, in the form of an Annual Volume of Transactions, to contain, in addition to the Annual Report, the Lectures and Papers read before the Society during the year, with notes of the discussions. Your Committee suggest that the first Volume be limited to about 60 pages.

7. That in order to meet the expense of the publication, contributions and donations should be sought from Members and others, and a special fund be started to be called the "Publication Fund."

8. Your Committee believe that the publication of Transactions would be evidence of active work carried on by the Society, and materially assist in appeals for funds, and be the means of increasing

the membership of the Society, especially among those who live too far away to attend the Lectures, yet who might become Members could they be told that the payment of subscriptions entitled them to an Annual Volume of the Proceedings of the Society.

In order to carry out the recommendations of the Committee, and to promote the Educational work of the Society, the Council proposes to raise a Capital Fund, and to print and issue in the form of a Volume of Transactions the Lectures and Papers delivered before the Society. To meet the expenses of the publication the Council appeals to members for Special Contributions and Donations. A list of those already received is given on page 21.

Transactions.

The Volume marks a distinct advance and development of the active work carried on by the Society, and will, it is hoped, be found especially useful to those members unable to attend the Lectures, and be the means of increasing the roll of membership.

Provincial Meeting.

With a view of disseminating a knowledge of the work of the Society and of extending its influence, the Council has decided to hold a Provincial Meeting, which it is hoped all members will assist in making a success. It has been arranged with The Sanitary Institute that this meeting should be held in conjunction with the Congress of that Institute in Manchester in September next, an arrangement, it is believed, which will be of mutual advantage.

Education.

The scientific investigations carried on by the Society having, to a large extent, resulted in improved methods of administration and training in certain classes, the Council has thought it advisable to appoint a special Sub-Committee to consider and report as to any main questions not already dealt with in the Memorial to the Board of Education, which may have a direct bearing on the Education Bill about to be introduced in Parliament.

British Association.

The British Association having appointed a Committee to consider and report upon the Conditions of Health essential to carrying on the work of instruction in Schools, invited the Society to appoint a representative on the Committee, and Mr. E. W. Brabrook, C.B., has been appointed.

British Congress on Tuberculosis.

At this important Congress, which was held in London in July, Mrs. Dickinson Berry, M.D., and H. R. Kenwood, M.B., D.P.H., acted as Delegates from the Society.

Library.

A number of works on Educational subjects have been added during the year, and in order to make the collection as useful as possible, a list has been made which will be found on page 73. Members desiring to borrow volumes can do so by applying to the Secretary, and paying cost of postage.

Members are particularly invited to assist in making the Library as complete as possible by presenting books, and by asking the authors of works of interest to the Society, to send presentation copies.

Finance.

Although the Balance Sheet shows a balance in hand of £25 9s. 8d. it should be borne in mind that the Members' Subscriptions are not sufficient to meet the average annual expenditure. An examimation of the accounts for the four years 1897–1900, shows average income from Members' Subscriptions £36 per year, while the average expenditure was £47. Development must necessarily be attended by a corresponding increase in expenditure, and although the working expenses have not increased in proportion to the active work carried on by the Society which your Council have the pleasure to record for the year 1901, it is felt that a considerable increase in the membership is necessary to allow of further work being done and the resources of the Society adequately developed.

FRANCIS WARNER,
Chairman of Council.

W. J. DURRIE MULFORD,
Hon. Secretary.

19th March, 1902.

THE CHILDHOOD SOCIETY.

STATEMENT OF RECEIPTS AND EXPENDITURE.

For the Year ended December 31st, 1901.

	£	s.	d.	£	s.	d.
By Balance from last Account				22	11	8
,, Subscriptions, 1899	0	10	6			
,, ,, 1900	2	2	0			
,, ,, 1901	26	16	6			
,, ,, 1902 (in advance)	2	4	6	31	13	6
,, Donation (G. Udny Yule)				1	10	0
,, Sale of Publications				1	6	0
				£57	1	2

	£	s.	d.	£	s.	d.
To Printing 500 copies Prof. Sherrington's Lecture	6	13	0			
,, ,, 1901	8	17	0	15	10	0
,, Stationery				0	17	9
,, Postage				6	3	11
,, Attendant at, and Lighting of Lecture Room				2	10	0
,, Clerical Assistance				2	2	0
,, Incidental				1	4	10
,, Essay Prizes				3	3	0
				31	11	6
Balance at Bank	26	3	8			
Cash due to Secretary	0	14	0	25	9	8
				57	1	2

W. J. DURRIE MULFORD,
Hon. Secretary.

Examined and Approved by
J. W. PALMER and WILLIAM VAN-PRAAGH,
11th and 14th March, 1902.

List of Donations to the Publication Fund.

Received since January 1st, 1902.

	£	s.	d.
The Rt. Hon. Earl Egerton of Tatton	10	0	0
The Rt. Hon. Earl Stamford	1	1	0
Lady Galton	10	0	0
Richard Biddulph Martin, M.P.	10	0	0
Fletcher Beach, M.B.	1	1	0
Mrs. Dickinson Berry, M.D.		10	6
E. W. Brabrook, C.B.	1	1	0
T. Bridgwater, LL.D., M.B.	1	1	0
F. J. Campbell, LL.D.	1	1	0
S. de Brath	1	1	0
M. Friedeberger, Ph.D.		10	6
Miss H. Gavin		10	6
W. Hamilton Hall, F.S.A.	1	1	0
Mark Hughes, B.A.		10	6
Miss F. M. James		5	0
Miss E. E. C. Jones		10	6
T. H. Jones		5	0
H. R. Kenwood, M.B., D.P.H.		10	6
James Kerr, M.A., M.D.	1	1	0
R. L. Langdon-Down, M.B.		10	6
Miss A. Mizen		2	6
C. G. Montefiore	2	2	0
J. W. Palmer...		10	6
Miss F. B. Poynton		2	6
T. G. Rooper, H.M.I.	2	2	0
G. H. Savage, M.D.	1	1	0
G. E. Shuttleworth, M.D.		10	6
Rev. T. W. Sharpe, C.B.		10	6
E. White Wallis, F.S.S.	2	2	0
Francis Warner, M.D.	1	1	0
G. Udny Yule	1	1	0

ABSTRACT OF LECTURE ON

FOOD DIETARIES IN RELATION TO SCHOOL LIFE,

By ROBERT HUTCHISON, M.D., M.R.C.P.,

Assistant Physician to the London Hospital.

DELIVERED MARCH 7TH, 1901.

INTRODUCTORY.

General sketch of the uses of food in the body and its nutritive constituents.

PHYSIOLOGICAL REQUIREMENTS OF SCHOOL LIFE.

Necessity for providing for growth and great output of muscular energy, therefore the diet of growing children should contain abundance of building material (proteid and salts), and should be relatively much larger in its total amount than that of adults.

SOURCES OF EACH NUTRITIVE CONSTITUENT.

1. *Proteid.* Animal *versus* vegetable sources. Advantages of animal proteids, especially of meat and milk; skim milk as a cheap source of animal proteid; pulses and oatmeal the best sources of vegetable proteid.

2. *Mineral matters.* If other constituents of the diet are right there is no need to make special provision for the mineral ingredients. Fallacies connected with supposed demand for "phosphates."

3. *Energy, producers of the Diet.* Relative advantages of carbohydrates and fat. Importance of fat as a fuel, and the advisability of accustoming children to it early. Use and abuse of sugar and sweets. Sugar is of great utility if taken at the proper times.

The *quantity of food* during school life to be abundant. Consequences of deficiency, especially in respect of building materials.

General arrangement of meals in school life—intervals often too long. Importance of good cooking.

ABSTRACT OF LECTURE ON

OBSERVATIONS OF CHILDREN AFTER THE METHODS OF NATURAL HISTORY.

By FRANCIS WARNER, M.D., F.R.C.P., F.R.C.S.

Delivered March 28th, 1901.

The leading thought presented was that children form a part of the living things around us, whom we may describe and study in the same way as other living objects are studied—all forming a part of the living world: all alike subject to the unity of natural methods which the doctrines of evolution have taught us to recognise. In studying natural history we describe what we see, carefully noting the order and sequence of events together with the surrounding conditions, then looking for the results that follow. In teaching natural history it is desirable to commence by indicating what to look at and what to look for. Further, we must learn how to describe what we see, and how to make just comparisons and inferences.

A flower shows separate parts to be looked at: we compare them as to number, size and form. We look at the parts of a leaf-bud, and compare the growth in blade and stalk under the influence of light and warmth. We notice the order of events and do NOT say "the bud opens to welcome Spring." In studying a child we proceed first to look at different parts of the body, the head and each feature, the movements and action that occur in the face, the eyes, the hand and fingers. The head may be observed as to size, outline, shape; there should be an ample forehead without lumps or ridges. The ears and nose, the openings for the eyes and the mouth are noteworthy. Children, like plants and flowers, grow differently in various localities.

Modes of brain action are observed by studying the child's movements. Every movement results from action of a part of the nerve system and expresses brain action—movements in the face, eyes, fingers, tongue, and the balance of the head and hand express brain conditions. Spontaneous movements express spontaneity of brain: its co-ordination under training should be the aim of early education.

From the observation of action, and the impressions received by children, we may proceed to follow out what occurs in their brains in thought and emotion, and thus seek a scientific basis of education and mental hygiene.

ESSAY (SECOND PRIZE) ON

STEPS TO BE TAKEN IN DISCRIMINATING WHICH CHILDREN ARE TO BE CONSIDERED SUITABLE FOR SPECIAL INSTRUCTION,

WITH DESCRIPTIVE NOTES AS TO IDIOSYNCRACIES OBSERVED IN SUCH CHILDREN.

By Mrs. FLORENCE OWEN,

Head Teacher, Special Class, Moorfield School, Bristol.

Read 7th Nov., 1901.

Before a proper selection of children requiring a special course of instruction can be made, each individual of the class should be made the subject of close study, both as to physical and mental capabilities.

This study should be carried on in the *schoolroom*, *playground* and, if possible, in going *to and from school.* In the schoolroom the first thing to note is, whether there is anything unusual in the appearance of the child, such as bodily deformity, peculiar gait, or postures of the body and, more closely, the shape and size of the head, with such malformations as hare-lip, serrated teeth, arched palate, or abnormal ear developments.

The size of the child might also be compared with that of other children of the same age (although this is not always a sign of deficiency). The best way in which to make this comparison is to stand several children of the same age in a convenient position, with heels and back close against the wall. Measure off the height with a pencil, level with the top of each child's head, upon the wall, and then with an inch tape measure read it off in feet and inches. Make a note of this and compare with the height of the child under observation.

The measurement of the head should be taken next; round the head, just above the eyebrows, noticing at the same time anything remarkable in the length or shape. Any defects in the development of the body, such as short arms or legs, unusual stoutness or emaciation, and coarseness of features should be noted.

To ascertain whether the limbs are proportionate to the size of the

[illegible] stretched on [illegible] the length [illegible] in feet and [illegible] the child to [illegible] should [illegible]

[illegible] be observed. [illegible] the lessons. [illegible] readiness [illegible] may be [illegible]

[illegible] will [illegible] problems [illegible]

[illegible] with the child [illegible] mechanical or [illegible] as [illegible] over- [illegible] inches of [illegible] made [illegible]

[illegible] very useful:

[illegible]

[illegible] there [illegible] are more [illegible] observed. [illegible] family. [illegible] to their [illegible] [illegible] self-confidence [illegible] care of [illegible] the power of

observation shown, and interest taken in what goes on around. The knowledge of its surroundings is an excellent test, and can be ascertained by means of conversational lessons.

When this study of the child has been thoroughly carried out in the schoolroom, playground, and in going to and from school, the notes taken should be carefully summarized, and the case brought under the notice of an educational expert, such as an Inspector, or one of the Managers of the school.

If in his opinion the child would benefit by special instruction, an examination by a medical man would be advisable. With his certificate saying that he believes the child to be mentally or physically unfit to receive instruction in an ordinary school, the whole of reports made should now be submitted to the Managers of the school. On their recommendation the child may be placed in a Special Class.

When cases of mental or physical weakness have been found, it is very profitable to continue their study on the same lines as before, and also to carry it into their HOME LIFE if possible. If it is not convenient to do this personally, yet, by judicious conversation with the parents, much can be learned of the children's idiosyncrasies.

A great deal of light can also be obtained by knowledge of the family history. Facts of heredity, violent temper, insanity, or intemperance of the parents; illness, especially fits, consumption, etc., all help in forming a clear judgment of the various cases.

The cases which indicate the desirability of special methods of teaching may be distinguished by idiosyncrasies that place the child under one of the four following classes :—

I.—The child in which distinct bodily infirmity affects the mental powers.

(a) A case of partial paralysis. A boy of a pale sickly countenance and irregular features. The paralysis makes him very weak in balance and peculiar in walk. He drags the left leg along the ground, and endeavours to help himself by the desks, etc. His left arm is almost useless and much smaller than the right. The expression of his face is vacant, but brightens up when he is spoken to. He cannot sustain interest for long, and soon lapses into a dull listless state again. He can do very little, and requires constant supervision and stimulation. He has no idea of number. His speech and articulation are very defective, caused chiefly by an arched palate and cleft tongue. The teeth are also much decayed. He suffers frequently from bad headaches

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Ability in articulation and amount of fluency of *Reading* will follow.

In *Arithmetic* the test will be the way in which mental problems are grasped and solved.

Throughout *all* lessons note the manner in which the child responds to orders given: whether the obedience is mechanical or intelligent, slow or quick, cheerful or sullen; such peculiarities as twitchings of the face or fingers, restlessness of the eyes, over-smiling are all worthy of note, and also failure in certain branches of learning. A record for each child of all the observations made should be kept for future reference.

The following heads for this record have been found very useful:

Division I.—PHYSICAL.

Date.	Name.	Age.	Height.	Size of Head.	Sight.	Speech.	Peculiarities.

Division II.—MENTAL.

Reading.	Writing.	Arithmetic.	Occupation.	Remarks.

In the playground the study of the child is most helpful, for there is less restraint, and the general bearing and behaviour are more natural than in school.

The attitude of the child towards its companions should be observed. Is the tendency to be unsociable, mischievous, spiteful or friendly, and fond of play. Also the bearing of the rest of the class to their playmate is worthy of notice, for children are very quick to detect weakness, especially mental, in each other.

In going to and from school observe the amount of self-confidence displayed by the child, and its general capability of taking care of itself. Also the style of walking or running and the power of

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(9) (*c*) We plunge now "in medias res." Hitherto the number of subjects taught in our elementary schools has been very restricted, owing to the needless amount of mechanical accuracy, or of detail, expected in each subject *before it could earn a grant.* This is all changed; "multa non multum" seems to be the motto of the new code. Formerly John Smith left school with a complete knowledge of every cape in Europe, but absolutely ignorant of the rudiments of English grammar; or he was deeply proficient in the mysteries of parsing, but knew nothing of the glorious history of that great Empire of which he was a citizen! When his elementary education was finished, he proceeded perchance to some secondary school, where his preceptor sought in vain to teach him French or Latin, because he was quite unversed in the grammar of his own tongue, and knew nothing of the connotation of the terms employed.

(10) Again, the instruction given in our Elementary Schools has often been intensely unpractical. The question of Managers and Teachers has been, "What subjects *will pay best?*" not "What subjects are most useful?" Accordingly, the Education Department was called upon to pay grants for Agriculture to town boys who would hardly know a rake from a hoe, and for Navigation to scholars whose only acquaintance with the sea was derived from a Day-Trip! Much of the dislike of farmers and squires to Elementary Education is attributable to the absurd curriculum of our rural schools in the past.

(11) The New Code lays down that scholars must now, as a rule, receive instruction in *English* (by which is to be understood Reading, Recitation, Writing, Composition, and Grammar in so far as it bears upon the correct use of language), *Arithmetic*, *Drawing* (for boys), *Needlework* (for girls); *Lessons* (including Object Lessons, on Geography, History, and Common Things), *Singing*, and *Physical Exercises.* This paragraph, as Prof. Withers says, "Gives us the irreducible minimum of a liberal education, that amount of things which everyone, whatever his special occupation is to be, ought to be trained to know or to do as a free man." (6)

Now all teachers will readily admit that in an Elementary School a foundation should be laid, so far as is possible, in all these subjects. But the practical question is, "How is provision for all these subjects to be made in the time-table?" There can be but one answer—"The instruction in each branch of knowledge must be less detailed, and one subject must play into the hands of another."

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(6) Memo. on the teaching of History, p. 4.

(12) Thus in teaching the geography of England, the teacher will dwell upon the *broad physical features*:—the mountainous west, the flat east, the general slope of the country, the effect of its geographical position upon its social and commercial history, but he may safely avoid making his scholars learn by heart *all* the capes of England, and the county-town of *each* county. In English history, he will dwell, in his lessons to his older pupils, upon the social development of each age, the great historical landmarks of each period; he will show how the England of to-day is the product of the England of the past; but he will *not* insist on his pupils knowing the names of all the wives of Henry VIII., or all the battles in the Wars of the Roses. (7)

In arithmetic, particularly, less attention may be paid to the attainment of mere mechanical accuracy. (8)

(13) One of the greatest evils resulting from the "subject-grants" of former codes, and from the cast-iron curriculum under which we have hitherto worked, is that the teacher has begun to look upon branches of knowledge that from their very nature interweave and shade into one another, as separate and independent "subjects," having little or nothing in common. Yet it cannot be too strongly insisted upon, that no part of knowledge is "known" at all *except as it is known in relation to the sum total of human knowledge.* Prof. Withers has pointed out that under previous codes *only* 4 *out of every* 100 *children in our elementary schools took up history.* (9) Yet how can the geography of, say, the British Empire be taught efficiently *apart from its history?* Most teachers, too, we presume have tried to give instruction in Citizenship to their older pupils and continuation-school students. But how can this be done successfully when the pupils know nothing of the story of the laborious gaining of those liberties we now enjoy? Prof. Withers has some wise words on the natural fear of teachers that the Board of Education is exacting a larger "tale of bricks" by insisting on a certain amount of attention being given to more subjects than hitherto. He says, "The very wholesome apprehension that the new arrangement of the curriculum might lead to further complexity and pressure among competing 'subjects' is to be met by the consideration that, on the contrary, this arrangement gives an opportunity to unify the curriculum by closely connecting it with the actual life of the children

(7) See paragraph 21.

(8) See paragraph 19.

(9) Memo. on the Teaching of History, p. 12.

(that is with their spiritual and intellectual life, as well as their physical), and by so linking up the several parts of it as to make one subject play, as it were, into the hands of another. Where it becomes necessary to choose between two things each of which is, in its own way, valuable, it will be necessary to make the choice on grounds not of their abstract value, but of their value to the children concerned."

(14) Now let us suppose that the student leaving a Training College has been appointed private tutor to a gentleman's son. He would probably map out his time, giving a certain amount to mathematics, to classics, and so on, so as to get due proportion in his teaching. But this done, he would certainly not erect an impassable barrier between the branches of instruction designed to lead to the complete education of his pupil. Thus, in mathematics, he would perhaps take an arithmetic lesson dealing with problems that would be presented to him in his vocation in life, or designed to stimulate thought. A reading lesson would perhaps follow, and would allow instruction to be given in history, geography, citizenship, etc., for reading is but a means to an end, that end being "To entertain oneself with the forced product of another man's mind," and it has been truly said that a reading lesson taken by a cultured teacher is a liberal education. A reproduction of the substance of the reading lesson would furnish a fitting theme for composition. History and geography would be made to illustrate each other, and map-drawing would prove a useful adjunct to both. In science teaching, if the teacher were giving a lesson on the parts of a flower, he would take his pupil out into the flower garden, allow him to pluck different flowers for himself, and teach him the names of the parts *there*. When the pupil was indoors, he would be required to draw the calyx, corolla, etc. Instruction in botany, physical geography, history, and elementary science, could be given when tutor and scholar took their walks abroad.

(15) Now, so far as is practicable, the elementary school teacher should follow the example of this imaginary private tutor, and make his teaching as natural as possible. The following quotation shows that the Board of Education is alive to the need of less artificial, and more spontaneous, instruction than is now given:—"The teacher should, as occasion offers, take the children out of doors for school walks at the various seasons of the year, and give simple lessons on the spot about animals in the fields and farmyards, about ploughing and sowing, about fruit trees and forest trees, about birds, insects and flowers, and other objects of interest. The lessons thus learnt

out of doors can be afterwards carried forward in the school-room by reading, composition, pictures, and drawing."([10])

(16) The Course of Instruction in schools for older scholars includes:—(*a*) "ENGLISH, by which is to be understood Reading, Recitation, Writing, Composition and Grammar in so far as it bears upon the correct use of Language." "No habit is more useful than a love of good reading." The ample page of Knowledge, "Rich with the spoils of time," is open to the good reader. "Reading," says Bacon, "maketh a full man." The child who before leaving the day-school has learnt to take delight in *good* books and to spurn *trashy* literature, has at least one safeguard for his leisure hours. Not less important, however, than teaching the scholar how to read aloud with expression and ease, is it to teach him how *to read to himself, and to study.* In village schools where the teacher has to give attention to some five or six standards, it is especially important to teach the older children (say those in Standards IV.—VII.) how to study and acquire information for themselves. This may easily be done in English History, Geography, and Natural History. Such a habit, like Mercy, is "Twice blessed," for it benefits not only the teacher but the children, who are thus taught to be self-reliant and strong. The teacher will, of course, question at the end of the period of study (which should seldom last over 20 minutes), enlarge the quantity of information given, make clear where it is hazy, and especially see that the children *have got hold of ideas and not of mere words.*

(17) *Recitation.* Now that no definite number of lines is asked for, it would be well for the head-teacher to provide for each of his classes a *Book of Poems*, so that when one poem has been learnt, the children may pass on to another, and yet at any time any poem may be revised. The poems should not be too juvenile or "goody-goody." They should inspire in the pupils sentiments of patriotism, piety and virtue. The explanations of the teacher, even with the children of the lowest standards, should not be restricted to verbal difficulties only; but the teacher should endeavour to bring out the beauty of the imagery underlying the words, and try to inspire a love for good literature. Of *Composition* nothing more need be said.

(18) *Grammar.* We are afraid that with many teachers the chief difficulty in teaching English Grammar will be negative rather than positive, that is to say, many teachers will find it hard to cast off

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([10]) "Curriculum of the Rural School."

the trammels of the past and *not teach grammar on the same lines as when they taught it as a class subject.* Let the teacher keep before himself the words: "*Grammar in so far as it bears upon the correct use of language,*" and steadily exclude what does not directly or indirectly tend to do that. Accordingly, a very important part of every grammar lesson will be *correction of sentences.* In the lower standards it will be sufficient to teach just the principal parts of speech; the great thing is *to apply the knowledge gained* to aid spelling and composition. Thus that "w-e-r-e" is a verb and means the same as "was," while "w-h-e-r-e" is an adverb and means "in what place"?

In Standard IV. the children should be made acquainted with the chief rules of syntax, which from our point of view are "that the verb must agree in person and number with the nominative," "that certain pronouns are nominative case, others possessive, others objective, etc." The pupils should then be made to correct such sentences as "He hit I," etc., *giving their reasons.* In this way the children's empirical knowledge of the rules of syntax, acquired from reading good books and from listening to the conversation of educated people, will become scientific. *Nothing like formal parsing should be attempted;* technical names, if used at all, should have homely synonyms.

(19) It has been the opinion of the writer for a long time that a great deal of the *Arithmetic* taught in our elementary schools is useless, either from a practical, or from an educational, point of view.

This subject in many schools has resolved itself into the mere art of the manipulation of numbers, and this not always by the shortest methods. The teacher must remember that mechanical accuracy is far less important than intelligence. After all, when a child leaves school, *the arithmetic he wants in everyday life is almost entirely mental;* accordingly, careful attention should be given to this branch of arithmetic; oral practice should always pave the way for teaching the rules on the blackboard. If the child meets with any difficulty in doing a sum containing large quantities, small ones should be substituted and the sum worked out mentally, *the mental process being afterwards performed on the child's book or slate.* The teacher will do well to use concrete quantities almost exclusively with the lower standards, and to limit these in size till they come within the range of the child's future life. It is clearly absurd, from a practical point of view, to set a child of eight years old to multiply 9,456 by 793, or a scholar in Standard IV. to calculate the cost of 975 pianos at £27 17s. 6d. each. Anything that tends to keep the arithmetic concrete

should be used freely, *e.g.*, diagrams to illustrate fractions, cardboard coins, &c. The teacher should be careful to teach his oldest scholars *the shortest* methods of calculation, such as those used by business men, *e.g.*, 168 articles at £7 19s. 11½d., take the value at £8 and then make a deduction; again (238 × 99) = 23800 − 238 = 23562, &c.

It is to be hoped that every head teacher will see the tremendous importance of insuring that "Instruction in the principles of the metric system, and in the advantages to be gained from uniformity in the method of forming multiples and sub-multiples of the unit," shall be given to the scholars of Standards IV.—VII. Consul after Consul has reported that Englishmen are losing orders in Continental and American cities because of their adherence to an antiquated and complicated system of weights and measures. Although many of our legislators have seen the importance of adopting the metric system, and its use has now been recognised by law, yet as legislation in our country accommodates its advance to the slow paces of public opinion, it seems unlikely that the reign of our new King will be marked by the adoption of a rational system of weights and measures. The elementary teachers of England must "educate their future masters" in this respect, and thus prepare the way for the speedy introduction of the system.

(20) There seems to be now a general consensus of opinion that most of the so-called Kindergarten *Drawing* on squared slates is useless, if not pernicious; freehand, and freearm drawing afford much better training. It is most important to see that the boys hold their pencils well away from the point, and loosely between the thumb and first finger; they should sit erect, with only their hands and wrists on the desks. The work of Standards I. and II. should be on paper. When Standard III. is reached, and the boys begin to reproduce simple ornament from the flat, the teacher will be wise to point out the beauty that lies in the curves presented, and thus help to develop their æsthetic faculties. The drawing of animated objects, such as cats, dogs, etc., from simple copies containing as few lines as possible, will prove both useful and interesting. Particular attention should be paid to drawing-to-scale. The boys should be allowed to take a footrule and then make actual measurements, of (say) the schoolroom, and of different objects therein, afterwards drawing them all to some easy scale. In Standards V.–VII. an effort should be made in all town schools to teach the boys how to draw-to-scale plans and elevations of easy solids. Some instruction should also be given in the elements of design, and the boys should oftentimes be

allowed to make designs of their own, both freehand and geometrical. In buying freehand copies, the teacher will do well to avoid those series where "guide lines" are multiplied *ad nauseam.*

(21) No subject can be made more interesting and more useful than *History;* and, on the ground, we suppose, that "Corruptio optimi pessima est," none can become more tedious and useless. Let us see, then, what hints can be given about the teaching of it. It is plain that the value of history is both absolute and relative—*absolute,* as being an admirable instrument of moral and mental culture; and *relative,* in that the study of the past affords us useful guidance as to the future. Let us examine its relative value.

Let us say at once, then, that we deem history a science, and, therefore, subject to fixed general laws, which philosophy may yet discover. It is a well-known saying that "History repeats itself," and the wise man tells us that "There is nothing new under the sun"—this is merely because like causes will always bring about like effects. This is as true of history as of other sciences. Thus "Tyranny produces revolution, and revolution anarchy, and anarchy tyranny, all the world over. One great movement of the human mind leads to another, and that to another, and so on. A reformation in religion is followed by a revolution in government, and that by social reforms." ([11]) And although the generalisations of history are yet in an empirical stage, still much may be done in the way of that prevision which is the true test of science. Thus it comes about that the wise statesman can gauge almost exactly what will be the effect and outcome of some wide measure of social reform, and ability to foretell the future is always a mark of a statesman, though not necessarily of a politician!

(22) Let the teacher, then, treat history so far as is possible on the inductive method. But in all induction we must start from *facts.* In the lower standards of his school, therefore, he will be merely content with placing before his scholars *facts for future generalisations.* To satisfy the curiosity and gain the interest of his scholars, these facts should be presented in the form of *biographies of persons.* Yet the ultimate aims of the teacher will determine *what* biographies and events he shall choose, around which to group his facts. He will choose the predominant characters from the pages of history, and will present them as vividly as possible, so as to appeal to the imaginations of his hearers. In order to do this, he will need more than bald, dry, historical facts; he must cull from all sorts of

([11]) Nat. Soc. "Manual of Science and Art of Teaching."

sources *details that will enable him to make historical personages and the past live again before the eyes of his pupils.* Pictures, coins, models, facsimiles of old documents, etc., must all be called in; he must attempt to give an idea of what our country was like at the period he speaks of, and of the state of society, for every man, however great, is the creature as well as the creator of the age in which he lives. Some rough idea of chronology can be given by the order of the lessons. The teacher will find abundant opportunities for appealing to the child's moral nature and for inculcating lessons of patriotism. With Standards III. and IV. the teaching will run on somewhat the same lines, but the teacher will strive to fill in the gaps existing between the personages taken as subjects for lessons in the lower standards, and will occupy more time than formerly on the state of society, pointing out how one stage of society has paved the way for another, *e.g.*, how each tribe passed from a nomadic and pastoral to an agricultural stage, and so on to an industrial stage of greater or less complexity; how the feudal system was a sort of half-way house between ancient serfdom and modern liberty, etc. Many of the lessons to the eldest children should lead from effects to causes, *i.e.*, *they should be encouraged to look into the past for the reason for the present.* Thus, the teacher would call the attention of his class to the fact, that no sooner was Queen Victoria dead than her eldest son was at once saluted by his relatives as King, and a little later on by the great officers of the realm, while at the same time Parliament met without summons to arrange for filling the vacant throne. The class will see from these facts that the British Monarchy is at one and the same time *hereditary and elective*, and he will point out that it became so at the Revolution. But in all these lessons the teacher must be careful not to lose the interest of his hearers; he must not ignore the personal element, and must afford play for the imagination by vivid word-painting. "Ars est celare artem"; it is of little use for the teacher to be scientific if his lesson is dry and wearisome. Let his treatment be *both scientific and interesting*, and history will become a useful as well as an interesting subject. Let the children learn to see in the England of to-day the England of the past, and no less certainly, the England of the future. The teaching of patriotic and "folk-lore" songs will prove a useful adjunct to the teaching of history. The teacher should be careful to use no historical "reader," dealing exclusively with one special period, *until that period has been set in relation to the whole scheme of British History.*

(23) *Geography* is less useful absolutely than relatively, that is, it is less useful as a means of mental and moral culture than it is as a branch of everyday knowledge. Accordingly, in this subject the teacher is less bound with regard to the order of his procedure than in other subjects. The question that should be uppermost in his mind is: "What are the geographical facts that are most useful to myself in daily life"? This aim will keep him from inflicting on his pupils those useless and wearisome lists of names that used to form the staple of so-called geography lessons. He will of course proceed from what is known to what is unknown; thus he will start with the plan of the school, then of the village or town, and then of the county. He will carefully explain "scale" and call on his scholars to draw easy plans to scale. Alongside with this, he will be able to show the meaning and use of a map, the position of N, S, E, W, with relation to us, and teach many geographical definitions such as hill, valley, river, etc. The teacher should always keep soft modelling clay at hand, so as to represent the contour of the child's neighbourhood; this clay should be largely used in teaching geographical definitions. By doing this, *the teacher will give ideas and not mere words.* Having marked the position of England on the globe, attention may be turned to the shape, size, and motions of our planet. ([12]) When this is done, the geography of the home country may be gone into more thoroughly; attention should be paid to the *broad features at first* to the exclusion of details, *e.g.*, the position of the chief mountain ranges, the slope of the country, its prevailing winds and currents, the effect of its insularity on the climate, etc. Some attention may be well paid to the geological formation of the country, the association of the coal-fields with the rocks of old formation, the limestone caves of the Pennine Chain, local conglomerates (if any), and so on. The mention of the coal-fields will lead on to a fuller acquaintance with the great industrial centres of England. Imaginary railway journeys along the chief railways will serve to bring into notice other towns worthy of attention, the teacher making a blackboard map and marking the places mentioned. Whatever is of historic interest should be dwelt upon, and the teacher should point out what a mine of historic lore is enshrined in geographical words, *e.g.*, how each invading nation has left its mark not only upon the surface but upon the language of this country. The geography

([12]) It is probably more accurate psychologically to reverse this order, beginning with the globe (the aggregate) and then coming to local geography (the parts).

of England completed, attention may then be turned to the British Empire, and then, if time permits, to other countries.

The teacher will need to be as careful in geography as in history, to make himself acquainted with those details that alone can supply the materials out of which the scholar can compose his mental picture of the place of which his teacher speaks. Dr. Fitch in his admirable "Lectures on teaching," tells of the infinite pains Dr. Arnold used to take to find out *what the appearance of a country was like*; for he held that the physical features of a land gave a sufficient clue to the character of its inhabitants.([13]) The teacher will do well to make much of the effect of physical conditions upon races of men. He will, for example, point out how the insularity of England has prevented us from being invaded by foreign foes; the only foreign foes who ever invaded us, became themselves absorbed in the conquered! Yet we have been so close to the Continent that advances in art and science have soon reached us. Being defended by the deep, we have not had to keep up a huge army to defend our shores, but have been able to avoid conscription, and turn our attention to the arts of peace. Again, the mingling of one race with another in the formation of our nation has resulted in the moulding of a national character possessing the imagination and vivacity of the Celt, the "gravitas" and love of freedom of the Teuton, the enterprise, daring, and love of the sea of the Viking, and the military prowess and refinement of the Norman.

(25) Lessons in *Elementary Science* are valuable for the complement of knowledge with which they furnish the mind, but they are much more valuable on account of the splendid mental training that they give. The teacher must remember, however, that the claim to the term "scientific" *lies not in the subject matter of the lesson but in the matter of treatment.* As Dr. Fitch has well remarked: "You may give a lesson on the future tense which shall be in the highest degree scientific, and you may give a lesson on the thermometer . . . which shall not be science at all."([14]) The *method* in grammar, history, and science lessons is the same, viz., the great inductive method. We are all, consciously or unconsciously, at almost every moment of our lives, forming inductions from facts, and making deductions from those hypotheses so as to verify them. The man of sound judgment in everyday affairs is the man who pays the keenest atten-

([13]) Lectures on Teaching, p. 359.
([14]) " " p. 415.

tion to facts, observing the facts, the whole facts, and nothing but the facts; who from these facts builds up careful inductions under which these individual facts may be subsumed, whose experience is so wide and whose reason is so trained that he is able to see the inevitable consequences that will arise from accepting any one of these inductions; and who is ready to discard everyone of his hypotheses *should they lead to consequences that do not square with facts.* The consideration that method is of primary importance and that the subject-matter is of far less consequence should weigh largely with the teacher in drawing up his schemes of lessons. He should choose that department of physical knowledge *in which he is best versed*, and in which the children will be able to get information at first hand, *i.e.*, by actual observation. The lists of lessons given by the Board of Education in Appendix X. of the Code are admirable in their suggestiveness. Different schemes are given for town and country children.

(26) The lessons arranged, the teacher must be content to stand by and let his scholars learn what facts they can from the objects presented to them. The same training of the faculties will be given by the examination of birds, of stones, or of gases. The teacher will simply direct the search; his own position is the same as that of his scholars—*that of an investigator of truth.* He will direct the attention of his scholars to the resemblances and differences between objects and classes, whether of things or of words.

With Standard III. *actual practice* in the classification of things should be given. The teacher will here begin to build up his inductions, leading on to those uniformities which are called laws of nature, showing how one law (set of facts) is subsumed under another, and that under a still wider, until we get (for example) the law of gravitation that holds the planets in their courses!

Before we conclude, *let us beg every teacher to supplement, wherever possible, observation by experiment;* there are very few lessons wherein simple experiments cannot usefully be employed. The full advantages of scientific teaching are never reaped until the pupil begins to question nature for himself *by experiment.*

LECTURE ON

A METHOD OF TEACHING CHILDREN TO READ

(WITH DEMONSTRATION).

By M. FRIEDEBERGER, Ph.D.

Delivered 21st November, 1901.

The subject of my discourse is a matter of great interest and importance in many respects, and in all its relations.

But it interests us chiefly, because our little ones are concerned in the way how to learn to read.

Except by the sandwich man, upon whom he has hitherto looked as the man of letters, the new pupil, who has crossed the threshold of his school for the first time, has not been puzzled by letters nor by men of letters. And now the a b c is indeed the alpha and the omega of his school-life, destined to be the most important factor in his education, nay of his whole life. For by the knowledge of these alphabetical signs he obtains the key to literature, the legacies that the greatest even of letters have left us in all ages and in all countries.

Well! what is meant by reading? We call reading the art of so collecting (Latin lego) the visible signs of speech-sounds, namely letters, as to recognise through them the thoughts deposited by others in written or printed form.

Hence reading is the first and most important subject of school instruction. The best way of imparting it has, in the course of the last century, occupied the minds of many educationists and philanthropists.

Let us here pause for a moment. For I have a pleasant proposal to make to you all, which I am sure will be readily accepted, in any case by the ladies present. I want you to make yourselves, for the purpose of my inquiry, very much younger, of course in your imagination only. In other words, let us go back to the happy, sometimes unhappy, time when we were five or six years old, and were just having our first reading and spelling lessons. Let us consider and realise the immense trouble and enormous physical and mental effort which the spelling of little words even, like *word*,

sword, *fever*, *ever*, then cost us. As often as not the little fellow will attempt to spell the puzzling word with his legs and hands as well as with his organs of speech, or be spell-bound indeed by the strange appearance of its confounding letters.

Surely, then, the mental process which spelling and reading entails is no easy matter to the child. And now, in order to give you no longer the pangs of painful reminiscences of spelling lessons in your happy childhood, let us reverse the picture, and realise that by the same process we now take in, at a passing glance, thousands of letters and hundreds of words, reflected each and all on the retina of our eye, in one second. And not only that. We translate these signs with their corresponding ideas, and with the velocity of lightning we take in one thought after the other conveyed by these sentences. Our eye never halts or rests, except to look back to detect a printer's error in mis-spelling or mis-print.

In the twofold picture I have thus called to your mind Nature reveals her great powers in all their wonderful grandeur.

Bearing then fully in mind all that the process of reading entails, both for the expert reader as well as for the inexperienced young child, we will only approve of such a method of teaching to read as is adapted to the capabilities of the child. The method must be easy and natural. Of course it must, in general, be based upon the same laws as underlie the whole circle of educational subjects.

No teacher, however much master of his subject, is able to teach without a definite and systematic plan, and this plan is called method. No method, however much improved, can be considered perfect. For it must be subject to changes resulting from scientific progress, and must needs take account of practical experience, since its forms cannot always be rationally demonstrated.

No method has within the last decades undergone more change and, in my opinion, still admits of greater improvement and simplification, than that which aims at letting a little child acquire the mechanical facility of reading.

Now here a word or two on the methods of teaching reading.

There are various methods and many are the modifications of these methods.

The first is the so-called *alphabetical method.*

I.—*The Alphabetical Method.*

Our parents, and possibly some of us, were taught the alphabet, that is, they learned to pronounce the different letters by their con-

ventional and arbitrary names: a, b, c, i, o, u, etc.; and even the order in which they follow in the alphabet forwards and backwards.

I don't know if there is anyone here in this audience who will venture to uphold this system.

I, of course, and all those who are at one with me in the desire to reduce the cumbersome burden of the beginner; who aim, first and above all, at simplifying what is indeed a complicated affair in any language, and undoubtedly so in our beautiful English language; I maintain that all those who wish to facilitate the heavy task will and must be opposed to the alphabetical method.

It is claimed for this method by its adherents, not that it is old but that it has a great influence on the correct spelling, namely orthography.

For, say they, by the naming of the letters and the frequent repetition and exercises, each word, with its component parts, takes a firm footing in the child's memory.

I will not stop here to argue the point. This may be or may not be the case. You know best. For you have your spelling lessons and spelling prizes in your school curriculum, and you ought to get at the end some reward for, and some result out of, the long and many hours of hard labour, if not of hard knocks.

I condemn even this method of teaching spelling, and I submit that we can attain our object of teaching orthography by means very much shorter, more easy and more simple, as we shall soon see.

The prevailing method of teaching spelling is, in my opinion, an enormous waste of valuable time. But, above all, it fails in exciting the mental faculties of the child, and makes him an automatic machine or a mechanical instrument.

Well then, I ask, on rational grounds, can any valid reason be adduced why the learner should have to differentiate between the names of the letters of the alphabet and their actual pronunciation? Can, I ask, from what you observe in nature or around you in your practical daily life or from any branch of science a precedent (by analogy) be quoted, in which the laws of analysis are so utterly disregarded and set aside?

The English are a very practical people. One experiences that fact daily. One appreciates it in literature, which reflects the character of the nation. For instance, you have a beautiful and practical proverb:

"Call a spade a spade."

As a matter of fact you do not call a spade a spade. At any

rate, you do not apply in the practice of spelling the principle enunciated by it. Spade is for you S P A D E.

And here I come to the fundamental principle underlying the method I have the privilege to submit to the consideration of this learned Society and its friends.

However quickly, however slowly you may pronounce the letters which make up any word of the English language, take for instance the word "spade," does our ear perceive in this way of analysing the component parts or speech-sounds? Far from it; you hear anything, even approximately, but the sounds which make up the compound.

How then is the child to realise and recognise the whole by its parts? You let him rely entirely on his memory; you give him no aid of association, of joining pieces together in one complete whole. You reward him for his cheerfully coming to school, and his standing quietly but not so cheerfully looking at the uninteresting letters before him, by asking him to do that which is even against his little experience of daily life.

Hitherto he has been accustomed to build up the bricks and stones, which a kind friend has given him, into a building which clearly shows the parts it is made of. If his little sister in her mischievous, but short way of destructive Analysis, knocks down his ideal tower, he can easily enact and re-enact Synthesis, and construct a new one.

He has himself, for the purpose of analytical inquiry, pulled all the hair out of father's shaving brush and thrown them on the floor, or amputated the limbs of his soldiers, or divided an apple into two, four, or eight parts (rather two than four, if he has the chance of further analysing, by the help of his teeth, any portion of it which will be given to him).

In each of these instances he can make with ease at least a good attempt at remedying the damage, and certainly see with his eye of imagination that father's brush is alright and complete, if not quite perfect; that his soldiers have only been wounded at the front, but are still to be looked upon as soldiers; that even the apple looks still like an apple, but for one missing quarter which has mysteriously disappeared.

All this is within his daily experience, and his practical, sometimes for us unpractical life.

The alphabetical method of spelling, all of a sudden, removes him from that sphere, and introduces him into a new one, in which things are not at all recognised any more, when cut up into parts.

You build up for him a tower of Babel and Speech, the mould of which he does not understand.

This, I maintain, is unnatural, this is not simplifying matters; it is an unscientific and unpractical mode of procedure.

I did not do that with my child. For him

pass is p a ss,
puss is p u ss,
Soup, etc.,
Suppose, etc.

Very well, you may say. How do you do it? What about spelling? What about our peculiar way of pronouncing similar words quite differently? What about the orthography, the correct way of writing English words, &c.

These and other questions I am prepared to answer to your satisfaction.

Well then, let us deal with these few but significant little things which we call the a b c and which make up not only the English but all languages.

A Phonetic Alphabet.

We have in the English language a collection of letters, but they are not an alphabet.

Our a b c gives us, I think, 26 letters, 5 vowel and 21 articulation marks. Without entering here upon the physiology of sounds and phonetics, I will only call to your mind the fact that we have 13 radically distinct vowel formations and 24 varieties of articulation, besides the variable aspiration H.

A perfect alphabet of English sounds would, therefore, contain no fewer than 38 distinguishable simple characters. But I will at once state that I leave their study to the men of science, and for the purpose we have in view, in dealing with our little ones, we can obtain all the sounds we want from little more than 12 distinct characters, the remainder being produced from these by uniform changes, to represent their uniformity of difference.

The elements of speech are separate sounds, appreciable by the ear and limited in number, so that each can be represented by one sign or letter.

s — z	c, k — g
sh — zh	q — ku
p — b	ks — x
f — v	ch — tsh
t — d	j — dzh
th — *th* (dh)	

These vocalised and non-vocalised articulations form, together with my simple vowel-sounds, my phonetic alphabet, so that each, when seen, at once suggests the sound of which it is the sign. The possession of such an alphabet must be a great boon to the learner, for his eyes lead him to the right sounds.

How different is our so-called alphabet from the one just demonstrated.

I have already mentioned, that there are, at least, thirteen vowel sounds, and only five letters or names for them. Besides this manifest inadequacy of the vowel marks to represent the vocal sounds, the English alphabet furnishes no characters by which to represent six of our articulations: sh, th in *th*in, th in *th*is, zh in azure, *w*h, *ng*, etc.; and we are thus forced to the anomaly of using *bigraphic* forms to represent simple sounds (sh, th), while there are simple characters in the alphabet which represent double sounds (x, q).

We have three letters for one articulation, c, k, q, besides the compound ch (in ache). The letter c stands for both k in copper and s in pla*c*e. The letters j and x represent combinations of two actions, j being equivalent to *dzh*, and x either representing ks or gs.

These are not all the defects in our alphabet from a phonetic point of view. There are others still graver and more formidable from a psychological.

We strive to train the senses to correct perceptions, and thus to put the mind in possession of facts, or we labour to acquaint them with the real, not the deceptive and that which is *not*.

And here, on the very threshold of their education, we introduce our children to a set of signs for the names we give to objects. Yet they are so defective, so uncertain in their phonetic value, that they cannot trust to their senses, but have to look at their teacher or to trust to memory or the place of the letter for their correct sounds.

No doubt much of this springs out of the attempt to make a Greek or Roman alphabet serve for every other language. But it is time that it is righted. For the waste of time and the labour spent in learning and using it, the uncertainty which attends it, the difficulties it lays in the path of foreigners learning English, render it a burden and a loss to everyone, but most of all to our little English men and women who have to spend much of their school-time in learning to pronounce *every* word, when they ought to be laying up knowledge.

If we could trust our ears in spelling and our eyes in writing down correctly every word, more than half the battle would be won, and the relief to our children would be immense.

The great inconvenience of this faulty alphabet has been long felt. But however easy it might be to propose a remedy, it is not so easy to get the most advantageous system adopted.

We must, therefore, content ourselves with clearing away the difficulties that have arisen from the want of a correct and generally recognised principiation of the English speech, and remove at least unnecessary obstacles placed in the path of our children. That work is aided, I venture to think, if we succeed in classifying the elementary sounds according to their natural order, in simplifying the complex, in making the difficult easy by practical demonstration and ocular illustration, in the presence of the learner, how each element of speech is actually formed and moulded into being.

Elements of Speech.

Here is not the time nor the place to give you a full exposition of the elements of speech, as I would wish them to be taught.

I can only select a few and give you a general outline. I hope to publish my ideas at a future time.

My principle is to proceed, as in general education, from the simple and facile to the more difficult movements.

I take the broad a, as in pā, bāth, pāss.

I join consonant at once to the vowel-sound, form syllables, words, and even little sentences at once, and gradually advance from the most simple sounds in the order of their increasing difficulty, till they are all learned. Soon a sentence is read, for instance:

Mama passes by the cot of the baby to say good-bye.

The Method.

The rational mode of teaching to read must surely be to begin with the mouth and teach the mouth to speak.

I present first to the imitative aptitude of the child the simple elementary sounds of language.

ā	ēē	ōō	*t*
à	ì	u	*s*

I get these practically mastered, before I endeavour to teach the eye their arbitrary signs. The sounds should be the first object of the teacher. Their practice, *p*, *b*, *s*, is a source of amusement to the

child, not a task. He learns them playingly, and in learning them he is led on almost insensibly to a knowledge of the alphabetic symbols. Thus by a method most agreeable, and in a very short time, he gains all, and much more than all, that is now obtained after laborious and protracted effort on the part both of teacher and pupil.

But there is much more in the system than simplicity. Both the ear and the eye are trained to accurate perception of little differences. Herein, you will admit, lies a great value.

Distinct and graceful habits of speech too are thereby formed and acquired. The pronunciation is at once clear and distinct in each vowel, simple and easy in the combination to a syllable or word, and natural, fluent, and harmonious in the full string of words, as we have them in sentences.

My method confines itself to practical improvements. I desire to demonstrate, that a strictly phonetic method of teaching reading is possible without any interference with orthography.

The eye of the child is gradually familiarised with anomalous modes of spelling—

"Do you see my eye?" "I can see you have two eyes;"—

and these anomalies have no retarding influence on his progress.

Some remarks ought here to be made upon the terms long, short, open, broad, hard and soft, etc., which mean nothing even to the teacher who uses them, and they only tend to confuse the notions generally entertained with respect to the qualities of speech sounds.

Long and short can only be applied to vowels which are essentially the same in formation, and which differ in nothing but duration. I, personally, only apply these terms with reference to the same radical sound. — ‿

We cannot overlook the fundamental principle, that the art of reading has as its basis the knowledge of the phonetic value of each sound.

I claim for my method to effect more easily, more quickly, and to secure more firmly the ability of reading, speaking and pronouncing by a definite consciousness. My method brings home to the child by *aural* and oral as well as ocular demonstration all that is being done by the single organs of speech physiologically, when a word is moulded into being.

Further, my aim is not only to start from the physiological basis and the mechanism of speech, in order to produce the elementary

and fundamental sounds according to their organic origin, but also to produce them in their purity, natural and easy, clear and distinct.

My boy is not troubled with things which are beyond his comprehension and of no interest to him. No mechanical practices, no dead language and killing spelling ways for him. He learns one or two sounds, and no longer does he get sounds alone but words, and that word at once in its natural association in a little sentence, as the logical expression of thought.

He is interested at once. "Father will *come home* and give me *some* sweets." Little sentences like these are drawn into the sphere of his reading-lesson, daily for ten minutes. He gets to know the material he is to learn. He knows by the association, by the context that this word is pronounced *home* in one way, that *come* in another.

The impressions he gets are strong and lasting because of the association. But this principle is not the essence of my method. It is further developed in the easy and natural analysis of the words. He knows the word as a whole and compound, and obtains a more definite and distinct knowledge of them by separating the component parts, first audibly and then visibly. Thus follows the knowledge of the parts from the whole or in the whole: eve, even, evening, and *vice versâ* synthetically.

The self-activity of the child is aroused by this method, which interests him. He sees his efforts, at once and from the beginning, crowned by success.

I claim for my method of teaching children to read, that it differs from the ordinary mode of instruction as given at the present day. It is easy, because natural, and natural, because it is based upon scientific principles and the law of nature.

We hear much of elementary education. Our children do not receive elementary instruction in speech in the schools. The false initiatory training of the alphabetic class is, in my opinion, fraught with momentous consequences.

I object to the child being taught to name the letters. I prefer him to actually speak the letters, *not of them.*

Does it ever enter into his mind, as it did into that of my child, that these letters stand for no more in speech than those puffs and blows and hisses, and other funny noises which every child can make perfectly, and with most delightful interest?

But I must leave off. In conclusion, the art of reading visible signs of language and speech-sounds; the power of translating them

into the corresponding audible ones, and of recognising by them what others have thought before us hundreds of years ago could only be missed by man of the lowest culture.

As soon as men ceased to live for the moment of the vanishing hour only, they began to fix their thoughts and ideas in known, if conventional forms and signs, and learned to decipher hieroglyphics, which in course of time gave way to literal signs. And just as, since that primitive stage of man illiterate, the whole of humanity has undergone a great change, so now the ability of the child to read opens up a new vista, a new and second world, a second stage of language and literature.

He is not confined, in his intercourse and conversation, to his surroundings, often weary and troublesome enough, when the constant flow of queries remains unanswered, or receives the answer: "Don't bother me," but he is able to occupy himself with the thoughts of others, enlarge his knowledge, and benefit by what the best and the noblest of all ages have said.

DISCUSSION ON

THE PRACTICAL BEARINGS OF THE CHILDHOOD SOCIETY'S INVESTIGATIONS ON SOCIAL QUESTIONS.

DECEMBER 5TH, 1901.

Mr. E. W. BRABROOK, C.B., who opened the discussion, said, that the work of the Society originated in a paper read by Dr. Warner before the International Congress of Hygiene in 1891, which led to the appointment, by that Congress, of a Committee of Investigation, and to the appointment of another Committee by the British Association, both of which Committees were presided over by Sir Douglas Galton, to whose enlightened interest in the subject and zealous services the Society is mainly indebted for its auspicious inauguration, and for the success which has followed its labours. Looking back to the period when the Education Act was passed, it seemed hardly to be present to the minds of the framers of that statute that there were children whose physical and mental conditions required separate and distinct treatment from the general national system, and the lesson taught by the researches of the Society led to the establishment of schools for defective children. Much, however, remained to be done to place the education of this class on a scientific basis, and the training of teachers should be such as to specially qualify them for dealing with the pupils under their charge. He could not follow the reasoning in Miss Dendy's paper read before the British Association, to the effect that restrictions should be placed upon the marriage of the feeble-minded because of the hereditary evils that might ensue; it would be better to make every endeavour to counteract the evils by raising the tone of social life. Among other points relating to the practical bearing of education generally on social questions, he mentioned thrift as a duty which should be very strongly inculcated in the teaching of all children, and referred to Mr. Alfred Pinhorn's "Spending and Saving" as an excellent primer of thrift. Dr. F. Warner, in considering various matters in relation to educational legislation, drew attention to the fact that, though the registration returns showed a preponderance of girls over boys, the attendance of

the latter at school was much in excess of that of the girls. In higher elementary schools, when there were scholarship competitions, managers were apt to neglect the dull scholars. The same tendency was apparent in high-class public schools. In all schools there were a certain number of nervous children, and he had noticed, especially among girls, that these were usually quick-witted and congregated together. A little knowledge and study of children, and of the facts the Society had collected, would show teachers the advantage of distributing such children among the more physically healthy. There were many such matters of school discipline which should be kept in view when there was so much discussion upon vague generalities. The Earl of Stamford, who presided, mentioned the training at Uppingham under Dr. Thring as being an eminent example of the duty of a school authority to develop the capacity of every pupil. As to the views expressed by Miss Dendy, he remembered being very much impressed by the facts brought forward at a Congress held in the United States ten years ago, showing the disastrous results of marriage among the feeble-minded. The discussion and the statistics collected by the Society would be of practical value in his work upon the Metropolitan Asylums' Board, where it was being increasingly recognised that provision must be made for the industrial training in small homes of feeble-minded boys and girls past school age, with a view to turning their abilities to their self-support.

SCHOOL DISCIPLINE, FROM THE SCIENTIFIC, INSPECTOR'S, TEACHER'S, AND HYGIENIC POINTS OF VIEW.

DECEMBER 12TH, 1901.

School Discipline, from the Inspector's Point of View.

BY A. W. NEWTON, M.A.

The term "school discipline" seems to stand for two different things. In a narrow sense "discipline" may be taken to mean the maintenance of that order without which school work cannot go on. In a wider sense it stands for the sum total of the influence which the teacher exercises upon the scholar, or, as some people would say, for the influence which the school exercises upon the scholar. The second idea includes the first, but it includes also much more. Good order does not necessarily involve the exercise of a good influence over the scholars, but where the teacher's influence is good the order is pretty sure to be good.

Good order has to be maintained chiefly because it is one of the conditions necessary for study; it may or may not be a good thing for children to learn to sit quiet, but to a certain extent quietness is essential, because without it no work can be done, and because in time noise wears out the nerves of the teacher. For a boy to shuffle on the floor is not in itself very objectionable, but we must suppress shuffling because it stops our lessons. In the narrow sense discipline is easily estimated, for it is quickly seen whether children are quiet and attentive, or noisy and inattentive. To estimate the teacher's influence on the scholar is, on the contrary, a very difficult and delicate task. Unfortunately the most important part of a teacher's work cannot be set out in an educational exhibition or put before an official; often it can obtain no reward except such as may be derived from the gratitude of pupils and from a good conscience. It is not, of course, true that an estimate of a teacher's influence is always impossible. When, after a change of teachers, boys who were dirty, irregular, and inattentive, become clean, punctual, and attentive, we may infer that the new teacher is a better disciplinarian than the old one. In very many

cases, however, no person who does not spend much time both in the school and in the children's homes can speak positively as to the teacher's influence. In a general way we should be most cautious in praising the "tone" of a school, and still more cautious in condemning it. One special reason for caution may be mentioned; an elementary school child is awake for about 5,000 hours per annum, but at school for about 1,200 only; hence for three-quarters of his waking time he is exposed to influences which the teacher cannot control. Man's nature depends upon two things, his hereditary tendencies and his environment. Whilst the teacher is only partly responsible for the second of these things he is in no way responsible for the first. As Huxley as written, some babies are born bad, and cannot be made good; the thing that our forefathers called original sin is a very real thing indeed. Considerations of this nature might well moderate the censure which some moralists throw upon school-boards, board schools, and school teachers. The persons who blame schools for all the faults of boys and girls, though doubtless much more humane, are not much wiser than the eastern king who, whenever he felt indisposed, ordered the execution of his physician. Considerations as to the limits of the teacher's influence may, also, damp the hopes of those persons who suppose that, when once regular school attendance is secured, our output of good boys and girls will be enormously increased, and our output of bad boys and girls enormously lessened. The truth is that the irregular child is often a child burdened by a bad hereditary disposition, and exposed to bad home influences. If we persuade or coerce him into regular attendance, we give his teacher a chance of improving him, but all that the teacher can do will often be in vain. The teacher is somewhat in the position of a gardener who is unable to choose his plants, and obliged to cultivate beds that are liable to be trodden down or dug up by ignorant and mischievous persons.

The important question of all is—"How are we to get the discipline that we want?" The answer seems to be—"Choose your teacher carefully and trust him to do his best." The choice is not easy; the power of controlling and influencing children comes naturally to many women and to a good many men, but many persons do not possess it and cannot acquire it. We may call the power magnetism, or we may call it what we will, but we find ourselves unable to explain it. The teacher, like the poet, is born and not made, though like the poet he can improve his natural powers by study, experience, and reflection. It is obvious that

where the natural faculty of discipline is wanting, neither experience nor the study of educational methods will make a good disciplinarian. Indeed, experience will often make a bad disciplinarian worse, for the older such a person grows, the more he often gets to be out of sympathy with children.

Our pupil-teacher system has one merit which is often overlooked; it does to a considerable extent eliminate from the teaching profession persons whose power of managing children is defective. Managers and head teachers do not willingly choose pupil teachers who cannot manage children, and the boy who finds himself unable to control a class will have such an unpleasant time in school, that he will probably turn to some other career than that of teaching. It is much less easy to get rid of an adult who has mistaken his profession; the older he is, the harder it is for him to find employment of some other sort, and the more the pity of school managers, head teachers, and officials protects him. In short, the pupil teachership acts as a sieve in a way in which no examination can possibly do.

The ideal disciplinarian must be a person to whom the management of children is pleasant as well as easy. The teacher who dislikes his work but goes through with it from a sense of duty may be most estimable from a moral point of view, but he is hardly the teacher whom we want.

The ideal disciplinarian, again, ought to be blessed with perfect health; he should never be fretful, fidgetty, or lethargic. An occasional outburst of temper may, however, be allowed him; under some circumstances, even, he may perhaps be justified in simulating temper which he does not feel. At times a storm clears the air. It is needless to say that he ought to set a good example himself, and that his own disposition should be a happy one. It is eminently undesirable that young people should associate learning and virtue with melancholy and dullness.

Above all he must realise the responsibilities of his position. Notwithstanding all that has been said regarding the limitations under which the teacher works, these responsibilities are real and important. He must understand that it is his duty to turn out good citizens just as much as good arithmeticians. We must, of course, be most suspicious of any teacher who tells us that he is so busy in forming the characters of his scholars that he cannot attend to their arithmetic. The chances are that the man who says this is an impostor of the first order, and that he knows he is an impostor.

Our ideal disciplinarian will be a sparing giver of rewards. He

will doubtless give praise to all honest work, but he will probably feel that prizes for proficiency in learning are useless to stimulate dull boys, and that bright boys can be got to learn for the sake of learning. He will certainly refrain—unless he is coerced by a School Board—from giving prizes for regular attendance, in the first place because regular attendance is a duty which should earn no special reward; in the second place because, as absence from school is often unavoidable, the element of luck enters largely into competitions for attendance prizes; and in the third place because hopes of a prize may tempt to school children whose homes are infected with measles or scarlet fever. Such prizes as he has to offer will be awarded for general good conduct and attention to work rather than for anything else.

He will punish but seldom. Unlike some teachers—mistresses as well as masters—he will not administer frequent small doses of corporal punishment. If he uses corporal punishment at all he will use it effectively, and he will use it rarely; whether he can do without it altogether need not now be argued. Most teachers hold one opinion upon this matter, and most writers upon education another. Perhaps the right view is that which Sir Joshua Fitch has expressed in his lectures—that corporal punishment should never be forbidden but that it should be seldom used, and that it will scarcely be used at all by the teacher who is fully master of his profession.

Our ideal disciplinarian will not discourse much upon the virtues and vices; most likely he will find a few well-chosen words much more effective than a lecture, and he will feel it impossible to put before young children the reasons for some of the most obvious duties of life. Thus we cannot formally demonstrate to children the objections to cruelty to animals. To throw a cat into the fire is a most atrocious act; to a boy who is capable of such a thing we can only say "Imagine yourself in the cat's place," or, "You are a brute if you do it." The first remark may conceivably excite his sympathy for the animal, the second may conceivably excite his sense of shame. We shall gain little by talking to him at large about the duty of man towards animals. Certainly we can convince him that the fire causes acute pain to the cat, but the conviction will not necessarily prevent the crime, for so long as he is amused he may be indifferent to the animal's sufferings. In short, he may have the temperament of the sportsman. In other words, we must appeal to the boy's feelings rather than to his reasoning powers, and if our appeal to his feelings fails we must try coercion.

Where young children are concerned, it is difficult to treat seriously the Spencerian principle, that no orders should be enforced until the reasons for the orders can be appreciated. This principle seems to fail just as much when applied to atrocities, such as the torture of animals, as when applied to the misdemeanants of every-day life—to the child who crawls over the dinner-table, or insists on taking his meals under it, or interrupts the discourse of those seated around it. Of course, the older children grow the more we can act upon the Spencerian principle; the educated adult can and ought to be made to understand the reasons for the various rules he has to obey.

The word "discipline" has associations of a military character, but in an ideal school there will be little that is military. Drill of a sort we must have, for when 300 boys have to go through a doorway and up a staircase some order is necessary. Such exercises as are physically beneficial we shall also have, and some such exercises fairly come under the head of drill. But though some school exercises are similar to exercises practised by soldiers, the relations between teachers and scholars ought not to resemble those between officers and soldiers. The military officer who enforces numberless frivolous and petty commands for no particular reason, is, so to speak, the very opposite of the Spencerian philosopher who enforces no command until the reasons for it can be understood. The teacher may walk in the middle path between the two; like a wise parent he ought to have his own way on all important points, but his scholars ought not to be worried by elaborate rules about trifling matters. The officer, again, unless he is much misrepresented, regards himself as belonging to one caste and the soldier to another. It is needless to say that no similar feeling should enter into the teacher's mind. The superiority of the teacher to the scholar should be the superiority of the well-instructed parent to the un-instructed child, and nothing more.

Though drill is an excellent thing in its way we may have too much of it, and we may also have drill of a bad sort. Many movements which are to be found in the drill books weary a boy or man, and at the same time give him no exercise; and the extraordinary jerks which some drill instructors love do not seem beneficial to physical welfare. Drill, it must be remembered, was planned not for the general good of the soldier, but merely with a view of making him efficient for one particular purpose. He had to be taught the evolutions that were necessary in the days when

military drill was invented, and, what was still more important, he had to be made into an automaton. Military drill is a creation of the seventeenth and eighteenth centuries. The armies of those epochs—the Ironsides and some others excepted—were made up partly of very ignorant peasants and partly of mercenaries, scamps, and criminals. It was necessary to turn all these persons into soldiers who could be trusted to fight and suffer for causes in which they could take no possible interest. The man had to be brought into such a mental state that, under all conceivable circumstances, he would march at the word "March," fire at the word "Fire," and so on. Drill of course answered its purpose; the soldiers of Marshal Saxe and Frederick the Great fought as bravely as men could fight. Now, however, the times have changed; we need not go out of our way to make automata: our civilization, with its minute sub-division of labour, will turn out far too many of them; and we need not trouble to teach boys the evolutions which modern inventions have banished from the battle-field. Obedience is wanted now as much as of old; but the obedience that is useful in the office and factory is intelligent obedience, and not the blind obedience which Frederick's soldiers rendered to their officers. In passing, it may be remarked that the promoters of "boys' brigades" seem to be working on wrong lines. Various games give better exercise than drill, and also prove more interesting. Moreover, playing at soldiers may stimulate that military spirit which is of doubtful advantage to a community.

The difficulty of estimating the discipline of any particular school is great, but few persons who have seen much of English elementary schools will doubt that as a rule, our school discipline leaves the scholars vastly better than they would be without it. No doubt there are teachers who are content with the mere externals of discipline, for every profession must contain persons who work in a perfunctory way. Of course also there are teachers, though but few, who do not obtain even the externals. But still the general experience of observers is that the beneficial discipline is the rule, and the weak discipline the exception. The misfortune, from a national point of view, is that many boys and girls of the elementary school class when released from school come under no discipline whatsoever. The parent can exercise very little control over the lad who is a wage-earner, and outside the workshop the employer can exercise none. Just at the age when the boy most needs guidance he is left to himself. Perhaps in the time to come the

State may provide the supervision which at present neither parent, nor employer, nor church, is able to offer. Some day, for instance, a wise legislature may rule that every young man or lad engaged in a sedentary occupation shall spend six or eight hours per week in out-of-door exercises, and may provide the places in which such exercises are to be carried out. Nobody who seriously thinks over the question can doubt that some such regulation would exercise a most powerful influence for good upon the health and morals of the millions in our towns and cities. Compulsory attendance at Continuation Schools, also, could hardly be productive of anything but good, supposing that a wide choice of subjects were allowed. It would not be wise, if it were possible, to put every lad through one course of instruction, but it would be quite possible to provide that every lad should receive instruction either in some subject of practical use or else in some subject of intellectual interest. To some such regulations we shall probably come when we have got rid of certain old fashioned notions about the "liberty of the subject." Speculation on this matter, however, would lead us beyond the bounds of the present discussion.

All the foregoing remarks are made with considerable diffidence, for the more one sees of such things as from their nature cannot be counted, weighed, or tested, the less one feels certain about them. After all we are somewhat in the case of the eighteenth century physician who—according to Dr. Johnson—spent his time in pouring stuff of which he knew little into a place of which he knew nothing.

School Discipline, from the Hygienic Point of View,

By Mrs. I. WHITE WALLIS.

Discipline can only be applied to living sentient beings; there is, of course, no such thing as disciplining dead matter. The purpose of discipline is to bring the living creature into harmony with its surroundings, for the sake of its further advancement. The purpose of school discipline is to bring the child into harmony with his surroundings, first, for the sake of the further advance- of himself as an individual, and then of the corporate body, of which he has become a part, in order that all may be schooled to fit in harmoniously with the larger corporate bodies of the more public life into which they will enter on leaving school.

The hygienic discipline of a school child includes the harmonious development of body, mind and spirit, as is implied by the use of the phrases—a healthy physique, a healthy mind, and a healthy tone of character.

But hygienic discipline means not so much the restoration of health that has been lost—the curative, the physician's contribution to health—as it means the maintenance of normal health by means of wholesome surroundings and conditions, such as the discipline of the body by physical exercise and rest, under the healthy conditions of warmth, fresh air, proper feeding and clothing; the discipline of the mind by mental activity and repose, under the healthy conditions of suitable *intellectual* feedings, where the food material is assimilated and bears its part in forming the mind; the discipline of the spirit by active exercise of the child's will, consenting to the will of the teacher and controlling its own actions to bring them into line with all that makes for law and order.

Although it may be true that the discipline of a school teacher must often at first be in part curative, owing to the imperfect condition of the previous life and training of the child who comes under his care, yet the curative means, the medicine (rewards and punishments) must be dropped as soon as possible, and the truly scientific conditions of hygienic discipline must be relied upon for maintaining the complete and vigorous growth of the child.

And the punishment form of discipline, even when used, must never be allowed to be positively harmful and destructive to the well-being of the child to whom it is applied. Such a punishment

as kneeling before the desk of the head mistress, with the arms held over the head, one I found being inflicted on a full grown girl about the age of 13, a short time ago, in a church school in the neighbourhood, is as much to be condemned as corporal punishment.

Yet, in that mistress's defence, I would say that it is possible she may have chosen it as a punishment from the category made out by Dr. Alexander Bain in his Science of Education, namely, as "one of the simple forms of disgrace, in the shape of shameful positions and humiliating isolation," which, he assures his readers, "answers for smaller offences but not for the greatest," adding, "They may do to begin with, but they rapidly lose power by repetition." The hygienic truth is, that any punishment that breaks down physical health or moral self respect defeats the aim of discipline, just as does any reward that calls into play the lower instead of the higher moral qualities of the child.

An essential element of healthy life is growth. There is no standstill, and the dwindling plant or life is an unhealthy one. Discipline then to be healthy must be of continuous growth in the individual, implanted and fostered in school life under the control of the teacher, taking deep root in the consciousness of the child, and becoming self-control when released from external government. And this kind does not come by mere receptivity of the mind, by mere acquiesence to repression when it is found to be inevitable, but it comes by following nature's methods, namely, by active self-expression under the best conditions for growth.

To take an enunciation of Herbart as our text, we would all say "When the environment is so arranged that the childish activity naturally finds the path of the useful and expends itself thereon, then government is most easy." And why? Just because the path of the useful is the track of the constructive, and the repeated habits of construction help to build up character in usefulness, in contrast to those habits of destructiveness and of mischief that nibble away at character and weaken the power of seeing rightly and acting unselfishly.

It is possible, while training the will to strength, yet to train it in direct opposition to goodness; therefore the discipline or government of another must always have as its intention the leading on to self-government by a moral training in *clear seeing and determinate choosing of the right.*

To mention a few of the means we may employ for inducing the children to choose the right, we must endeavour that such choice shall always be pleasurably associated with power and success; that

such choice shall come very often within the circle of interest, and that the choice shall be closely connected with the child's activities. Thus we shall establish the habit of conscious choice of right from a personal liking to its results, until the self-will of the child is found to be consenting to, and not resenting, wise government.

Take, for example, the point of management in class discipline. The class is assembled; a certain object, it is explained to all, is to be attained by the thirty minutes lesson. Now, provided that the object be good enough to arouse interest, and wide enough to raise association in the mind, it will in itself produce the necessary discipline of the class to make it step together, especially when from past experience the children know they will be allowed time enough to enjoy the object when they have attained it; then they will be on the alert, be of one mind in hastening to arrive at their goal.

To give an explanation from physical discipline. A class is to be taken for a walk for its physical health. Before starting the object of the walk is chosen (let us suppose it to be the Albert Memorial in Kensington Gardens); it is made known to the class, and the points of interest are called attention to. The children have learned by experience that having reached their goal they will not immediately be dismissed, but will be allowed time to reap enjoyment from their effort. Who does not know the difference between the order that will be maintained by the children on such an expedition, and the disorder, straggling, loitering that will occur in simply "going for a walk." The ease to the teacher will more than compensate him for the few moments spent in the forethought and preparation for the walk.

I have here the prospectus of The King Alfred School, that states that the last few minutes of the longer lessons are spent in free conversation, the practice being to let the children freely talk over the task they have accomplished, and appreciate the climax to which the teacher has led them in their lesson. In this school "government is most easy."

All children are trained to be at least passively attentive in class, but one may reasonably ask: Why should children be attentive to their teacher? It is not because they should expect to be interested, having always felt each previous lesson to have been of use or of enjoyment to them.

It is often argued that numbers make the discipline very difficult. This of course must be so where the discipline is simply of a coercive character, where the will is merely strengthened and sometimes broken; and where little heed is given to training the strengthened

will to co-operating of its own free choice with the will of the trainer. But in those instances in which the healthy, moral tone of a class has become established, there the force of numbers, if employed on behalf of the teacher instead of against him, is in itself a great power in the right discipline of the class. And we must bear in mind that while force is power, for good or for evil, it is mind that guides force and should direct it against evil. The principles of guidance are essentially the same for the few or the many.

There is time left to refer to one or two of the many methods that may be adopted for guidance.

Routine, regarded as an end, is a deadening method of discipline, checking spontaneity, spoiling self-expression, and killing interest. Yet routine, employed as a temporary adjustment of means to an end, an accommodation always requiring review and modification, constitutes a most wholesome environment for intellectual and moral growth; but, of course, routine must always remain the servant, the tool of the teacher; it must never become his master.

Another method of sound discipline is always to meet the growing mind of a child with a proposition rather than with a negation. The one is instinctively felt to be an advantage, a help forward; the other a disadvantage, a being driven back. The proposition is sympathetic, and shows its reason in part; the negation is repressive, and, by hiding its reason, generally appears intolerant.

In the early days of the People's Palace at the East-end, where you will easily understand adults had to be trained much as though they were children, a notice was placed upon the billiard-room wall: "Gentlemen will wash their hands before using the board." Of course the gentlemen always did. "No gentleman with dirty hands must use the board" would have been invidious, and might easily have been evaded. Some ingenuity too had been expended upon putting into a positive rather than a negative form an intimation set up on the gymnasium door: "Those members who have not brought their tickets will be obliged to remain outside."

A school rule that "children must change their shoes before running into the playground," would be more effective than its negative "that children must not run into the playground until they have changed their shoes," which in this form suggests the very thing it is desired to avoid. One of the psychological reasons of this method of discipline lies in the fact that children love proof, and therefore yield to propositions most readily, because we can always prove a positive, while we can never prove a negative.

Another principle of guidance that a mother puts into practice in

disciplining her child from its earliest infancy is "the spirit of expectation of the right choice." If that has been the attitude taken from the very first towards obedience, the hopeful waiting expectancy will seldom fail to procure obedience, and nursery rebellion will never dismay the manager.

It is true that wrong early training may have weakened the power of this principle before the child reaches the teacher, but in association with numbers the spirit of expectation of obedience gains power from the traditions, and it is far too valuable an element to be overlooked, for if reverence and obedience were ignored by the school the race would degenerate. Though ability counts for much character counts for more.

Herbart gives great help to the teacher in the training of healthy moral life, for he progresses beyond Arnold of Rugby, who leaves this principle of expectation in moral guidance to the influence of training only, while the schools that follow Arnold often rely upon expectation in training alone, without even the help of guidance. But Herbart admits no *teaching* apart from righteousness, and trains for morality in the classroom as well as in the playing-field. He calls for habits of accuracy, truth, clear seeing, right decision, by the daily intellectual school work, and demonstrates that there is no distinction to be drawn between physical, mental, and moral habit in this matter.

Almost all philosophers since the days of Plato have been in agreement that evil in man is due to a want of power to see clearly and to will firmly;—that evil is not of a positive nature to be repressed, but rather a name for a certain want of faculties. As Browning puts it, "Evil is null, is naught, is silence implying sound."

Here then lies the opportunity of the educator—to cultivate the moral insight, and the establishment of will power, and then he may fairly hope as a result to obtain good character.

A mere blank innocence is not goodness. Men and women are not valued for what they have left undone that was wrong, but they are valued for the good they have done and are capable of doing. The immaculates are a matter of indifference to us—non-entities. The actively good are lovable and beloved, in spite of occasional wrongs that may mingle with their nobility. So that a healthy school discipline may be considered not as a power to repress evil, merely preserving innocence—with the constant "Do not" of the old, limiting law, but as a power to be used in developing the activities of insight and of will, for the purpose of the gaining of wisdom.

School Discipline, from the Scientific Point of View.

By FRANCIS WARNER, M.D., F.R.C.P.

The influence of the teacher in maintaining discipline in school is largely a matter of training the children to do as teacher does; that is, to imitate the manner, action, and speech of the teacher, whose expression, voice, movements, and habitual attitudes the pupils tend to follow. Quietness (*i.e.*, absence of noise) is necessary during instruction, but absolute stillness of the body is not necessary and, indeed, tends to lessen brain activity. Control of the pupils is a primary necessity—more important in the infant school than reading. This may often be better attained through the child's sight—as must be done with the deaf—rather than by spoken command. A help to discipline is the habit of observation of the children in the class, which enables the teacher to know the general character and tendencies individually. Nervous children may be known by seeing them; they are gregarious in social tendency, are quick-witted, and encourage one another in frivolity. It may be better to disperse this kind of children in class. Military drill is useful: it improves the physique and induces comradeship; but it does not much improve mental status. Free exercises, imitated carefully and exactly from the class-teacher, may effect orderliness in the brain of the pupil and produce harmony of action, thus promoting like habits in the children and their instructor.

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